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ABSTRACT

"Options in Education" is a radio news program which focuses on issues and developments in education. This transcript contains discussions of the book "Simple Justice" by Richard Kluger; writing seminars for judges and lawyers, held by the American Academy of Judicial Education; the teaching of writing; visual literacy--picture words; teacher internships; SIGI--the System of Interactive Guidance Information; changing jobs; and the PKU birth defect. Participants in the program include John Merrow and Wendy Blair, moderators; Donald Bigelow; Ronald Goldfarb, of the American Academy of Judicial Education; Richard Lloyd-Jones; John Dibbs, of the International Visual Literacy Association; Leland Dean; Arthur Krohle, of the Educational Testing Service; Susan Thomas; and Joe and Janelle Beardon. (JM)

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INSTITUTE FOR EDUCATIONAL LEADERSHIP
THE GEORGE WASHINGTON UNIVERSITY

TRANSCRIPT FOR PROGRAM SCHEDULED FOR BROADCAST

THE WEEK OF APRIL 12, 1976

National Public Radio

Options in Education

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OPTIONS IN EDUCATION is an electronic weekly magazine devoted to coverage of news, features, policy & people in the field of education. The program is available for broadcast to the 181 member stations of National Public Radio.

The Executive Producer is John Merrow. The Producer is Midge Hart. The Associate Producer is Jo Ellyn Rackleff, and the Co-Host is Wendy Blair.

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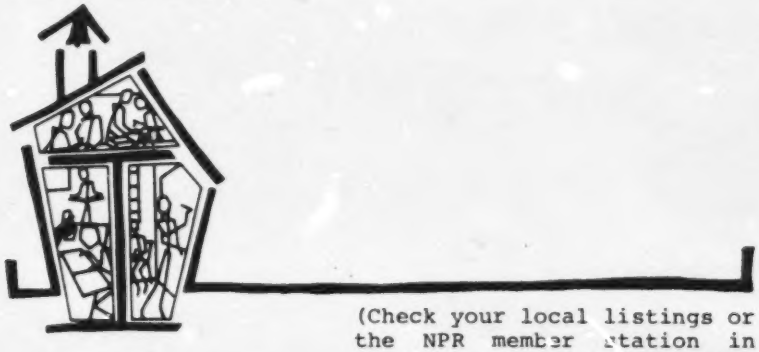

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Contact: Ms. S. Gay Kinney
Public Information
(202) 785-6462

(Opening Theme)

BLAIR: I'm Wendy Blair with NPR's OPTIONS IN EDUCATION.

OPTIONS IN EDUCATION is a news magazine about all the issues and developments in education - from the ABC's of primary education to the alphabet soup of government programs. If you've ever been to school, we have something that will interest you.

On this edition of OPTIONS IN EDUCATION --

Occupational Hazards - Getting Straight!

DR. ARTHUR KROHLE: It's been surprising to us how quickly a value that's so commonly espoused like helping others would be given up in favor of some, perhaps, more basic values - like high income.

("Anticipation")

Getting Started!

DR. LELAND DEAN: Education does a very poor job of inducting new members into the profession.

("Getting Better" by the Beatles)

And - Getting Better!

RICHARD JONES: Teaching somebody how to write is like teaching them how to make love. You can't really tell them too much. They've got to get out there and do it.

("Black & White" by Three Dog Night)

DR. DONALD BIGELOW: Is simple justice that simple? And does it come about because of dedication? Is it luck? What does make it all come about?

BLAIR: "Simple Justice" is a book by Richard Kluger, which tells the story of the early legal struggle for racial equality in America's schools.

"Before it was over, they fired him from the little schoolhouse at which he had taught devotedly for ten years. And they fired his wife and two of his sisters and a niece. And they threatened him with bodily harm, and they sued him on trumped up charges and convicted him in a kangaroo court and left him with a judgment that denied him credit from any bank. And they burned his house to the ground while the fire department stood around watching the flames consume the night. And they stoned the church at which he pastored, and fired shotguns at him out of the dark. All this happened because he was Black and brave - and because others followed when he had decided that the time had come to lead . . . His name was Joseph Albert Delaine."

BLAIR: Those are the opening lines of "Simple Justice". The book describes street battles, court battles and the formation of the Black legal establishment. Here's OPTIONS IN EDUCATION's Book Reviewer, Dr. Donald Bigelow.

DR. DONALD BIGELOW: It's the history of Brown vs. Board of Education. Most people recognize that in terms of the Supreme Court decision that outlawed segregation of the Blacks in America. And this is the book about that story - of how all these people got together and, finally, managed - against the laws that were against them - to get to the Supreme Court, to overturn laws which the Supreme Court, itself, had been maintaining against them.

A heroic deed! And Mr. Kluger does it full justice, and it is a well-entitled book, called "Simple Justice". It probably would be twice as good if it were half as long, and, of course, Justice, I suppose, should be heavy, and it is a heavy book. It's a full book going right back to the beginning of the Constitution - so, there's a good deal in "Simple Justice" that is simple history.

There is also a plethora of wonderful, wonderful stories - all the names in Black history that you would associate, and all of the Supreme Court justices that we've come to know - they're all there.

One has to note the very interesting point -- this business of whether justice comes about because of dedication and hard work or a little bit of luck -- this is all conveyed in the unhappiness that one man died. That man happened to be Chief Justice Fred Vinson. When Thurgood Marshall and all of his allies in the NAACP finally brought the case - and it wasn't one case, but five cases that we know under Brown - to the Supreme Court, and the Court was headed by Chief Justice Fred Vinson, who was not a notorious liberal by any matter of means, and, although, he had, I'm sure, done his share of justice as a Supreme Court justice, it was not expected by the four dissenters on the Court at that time that what led to Brown would get very far.

They argued the case almost all year, and on June 8th, they left the case in limbo with a set of five questions that the lawyers should work on over the summer.

The fact is that during the course of the summer, Mr. Vinson died. And he was replaced by Chief Justice Warren who opened the new court. And it is my opinion that this simple "fact" could lead one to believe that if Mr. Vinson hadn't died, Brown vs. The Board might not have come out as it did.

I'll read one paragraph about that: "All the members of the Court attended Vinson's burial in Louisa, Kentucky," -- notice the state -- "his ancestral home. But not all the members of the Court grieved equally at his passing. And one, at least, did not grieve at all. Felix Frankfurter had not much admired Fred Vinson as a Judge or as a man, and he was certain that the Chief Justice had been the chief obstacle to the Court's prospect of reaching a humanitarian and judicially defensible settlement of the monumental segregation cases. In view of Vinson's passing just before the Brown reargument, Frankfurter remarked to a former clerk, 'This is the first indication I have ever had that there is a God.'"

MERROW: It sounds like "Simple Justice" is a well-told tale in which the good guys finally win. Are you recommending it to your listeners?

BIGELOW: I would recommend it to anybody who has $16, a lot of time, and doesn't know much American History. Mr. Kluger is dedicated to his cause as were the people he describes.

BLAIR: Dr. Donald Bigelow reviewing Richard Kluger's book, "Simple Justice". He spoke with John Merrow.

A PRIMER ON THE LEGAL ESTABLISHMENT

MERROW: Tell me what a judge is.

CHILD: A man who can throw you into a jail.

MERROW: What's a policeman?

CHILD: A man that can take you there.

MERROW: Okay - what's a lawyer?

CHILD: A man that try to defend you - so you can't go there.

MERROW: Who passes the laws in the first place?

CHILD: The robbers.

BLAIR: That young student of law had things a bit confused, but that's not surprising. Law is complicated. And what makes matters worse is "legalese" and just plain bad writing by judges and lawyers. At least that's the opinion of the American Academy of Judicial Education. Legal opinions are often as convoluted and difficult to understand as the law itself. So, as part of its continuing education program for judges and lawyers, the Academy holds Writing Seminars. Tom Steward reports.

(Music)

STEWARD: The Academy has held several Judicial Writing Seminars to get the purple out of the judges' prose. Before attending, judges forward legal opinions to acquaint their judges, the faculty, with their work.

The faculty is two English Professors, a rhetorician/judge and a lawyer/writer, Ronald Goldfarb.

RONALD GOLDFARB: "Notwithstanding", "a priori", "heretofore", latinisms -- if you read law reviews, if you read bar journals, if you listen to lawyers talk, it is almost as if somebody does something to law students when they come into law school to teach them to write a very pompous, heavy-handed, jargon-way - because that's the way lawyers are supposed to talk.

STEWARD: As a writer, Goldfarb thought the idea was fine. But as a lawyer - perhaps impolitic. So, he was surprised when the judges arrived and stayed to be criticized.

For a week, they sort through the judicial jargon - beginning each morning with a lecture on the ground rules -- form, style and punctuation. They read the Strunk & White classic, "Elements of Style" -- not that they haven't read the rules before, but that the legal profession has a code all its own that is increasingly difficult to break.

GOLDFARB: Lawyers will quickly adopt form language that has been accepted through the years, and they'll say in a document, for example, like a will -- "In appointing an executor, I direct that my executor pay all my just debts . . ." and then do as follows. No client comes in and says, "Now, be sure you pay all my just debts."

In addition, there is the general problem with educators deploring the adequacy of the training of young people coming along in writing. Well, that problem gets compounded when you're a judge, and you're dealing with matters that affect the life of the community, commerce, great major problems of commerce and finance, relationships between people, and institutional battles. Not only is it aesthetically important that they write well - because it looks good - but, also, because the great issues of our time are being determined in those opinions, and it's very important that they be understood by the community - not just by lawyers and other judges - and that, in fact, judges say what they intend to say.

STEWARD: Do you have a couple of examples from your classes that you could show us?

GOLDFARB: I'll give you an example of one judge who wrote just everything very flowery and very Shakespearean, and I found in one of his opinions this statement -- "If this were a true statement of the doctrine, then the unruly horse of public policy would be joined in the stable by a steed of even more unpredictable propensities."

STEWARD: After reading their own remarks like that, some judges begin to enjoy finding fault with themselves. Some of them aren't accustomed to agonizing over this kind of sentence, but some soon begin to worry about aesthetic problems. While a legal opinion isn't meant to be entertaining - neither is it to read like the U.S. Legal Code. But Goldfarb usually discourages embellishments; stressing that with economy of language comes a certain elegance. With simplicity, style.

GOLDFARB: Teaching somebody to write is like teaching them how to make love. You can't really tell them too much. They've got to get out there and do it. And so we make them write an awful lot of different kinds of things, and we come back and edit those things, and they edit them themselves, and they check each other's stuff.

STEWARD: How applicable do you suppose to other professionals in different fields who have their own jargons, and have the same problems as many of the people you're working with is this method?

GOLDFARB: I think the same kind of thing we're doing could be done by all professions and all avocations. As a matter of fact, I've gotten a good deal of correspondence in response to a magazine piece I did on our conference. And I think it's particularly serious with lawyers who deal with other people's problems in very significant ways, but I'm sure it would apply to doctors, too. Doctors have their shorthand phrases, and their jargon. So do engineers and architects. I'm sure it applies across the board.

STEWARD: What sort of problem is there going to be ten years from now? What sort of problems do you expect with the new crop of lawyers?

GOLDFARB: I'm sure it's going to be worse - because legal education hasn't taken this into consideration yet. And how that will affect their writing skills in the future, one can only speculate. But my guess is it will be worse.

Continuing Education is dealing with the problem too late, actually. It's important, and it's useful, but at the educational level, itself, in training professions (or people in any avocation) where more attention should be paid to writing, I think.

STEWARD: Ronald Goldfarb, a Washington lawyer and writer. The judges continue to take criticism after the course. For a year they send opinions to their tutors. Thus far the majority of participants have been Appellate Judges, but as part of their continuing education, more trial judges are enrolling.

The American Academy of Judicial Education is delighted. After all, the laws of the land are written under the laws of English. This is Tom Steward.

(Music)

BLAIR: A lot of people are asking why kids can't write. Perhaps a better question is: How good do they have to be at writing? The answer depends on what they want to do. Richard Lloyd Jones of the University of Iowa says most people can get along with their basic writing skills.

RICHARD LLOYD JONES: In many respects, our society does not demand complex writing from a large percentage of the population. From maybe 20% of the population, it demands a very great amount of writing, highly professional writing. Your lawyer, for instance, is in many ways, a writer, as much as he's anything else. Clearly, all the people in the news trades, the media, have to have a lot of writing skills. Most professionals do.

But in terms of public skills in writing, the number who have to be superbly competent is probably a relatively small percentage - so that the important skills in writing - for the whole population - undoubtedly have more to do with using the language to formulate your ideas; to be precise in the way you think about things; precise in the way you feel about things.

KALVELAGE: Is it something you can teach in English classes?

JONES: Well, probably not head-on, but you certainly can increase one's sensitivity to language. You certainly can give people practice in trying things out, and audiences to respond to their practice.

KALVELAGE: How would you do that?

JONES: Well, let me put it by analogy. If you never had anyone to talk to you'd not be too good a speaker. You become a better talker by practicing at it. You become a better writer by practicing in real situations. It's the simplest kind of procedure, such as - make a large part of the writing for the other people in the class; to explain things to them; to try to persuade them of things; to tell them about yourself; to tie the writing to work in the student's own special interest area.

One of the things we've always found -- If you can teach a writing course, say, for engineering students, in a context in which they're doing engineering work, they'll write much better papers. They'll be much more concerned about what they say. They'll feel more responsible for the content of the paper. Now, the mechanical craft, the physical craft of turning sound patterns into written patterns is a craft that has to be learned like any other. And it provides some real problems of physical coordination, with motor/visual activity - that are learned even as you learn to play tennis or hopscotch or whatever. I don't mean to suggest that it is not a hard thing to teach or a hard thing to learn - or that it is not important - but it is a means to an end - not an end in itself.

BLAIR: Richard Lloyd Jones of the University of Iowa talking with Reporter Gail Kalvelage of Station WSUI in Iowa City.

So, good writing is important - but verbal skills aren't the only way to communicate. For example, TV gives fresh meaning to the phrase -- "A Picture Is Worth A Thousand Words". John Dibbs of Eastman-Kodak, one of the founders of the International Visual Literacy Association, talked with Reporter Gary Webb of Station WPLN in Nashville about that group's interest in "picture-words".

DIBBS: The easiest way to understand, I suppose, is to think to yourself that words are something that we string along. In other words, when we talk or write, we use sequences of words, strings of words. Visual-languaging uses strings of pictures or sequences of pictures. So, when you see a flow of pictures on TV, you're watching, in effect, a string in time of pictures. And if you see a cartoon in the newspaper, you're seeing a string of pictures. And the two kinds of "flow" are similar, and, so, we talk about visual-languaging, that is, intentional use of pictures, to communicate ideas through sequences of pictures.

WEBB: In 1964, the SAT scores began to drop - that is, the Scholastic Aptitude Tests which are given to high school juniors and seniors - began to drop, and has dropped steadily each year. And, in fact, there have been some dramatic drops. But, at the same time, the IQ seems to have gone up of the tested population. What's going on here?

DIBBS: Well, two kinds of factors are at work. The IQ has gone up because the children have learned a lot from TV, and, in fact, have learned visual-languaging from TV. And that has caused them to become skilled in sequencing ideas -- that is, in arranging ideas in proper order. So, some of the parts of the IQ tests have tested them in just exactly those things - that is, how well can a child put things in a logical order? Today's children - at the age of three, four & five - are ever so much better at it -- something like 30% better at it -- than the children of twenty years ago. So, they have that sequential visual skill.

To a certain extent, however, that visual skill is in contradiction to the kinds of verbal skills that we've been accustomed to thinking are the most valuable. And we have always thought of logic, for instance, as being verbal. Now, what today's youngsters can do is be very logical and express themselves very well in visual ways. So, what has happened is -- that the child, this young learner, becomes more and more skilled in visual-languaging and his skills in verbal languaging don't develop as fast.

Consequently, his verbal skills compared to people of twenty years ago appear to have dropped off. At the same time, his IQ continues to rise - so that when a child enters school his IQ is higher, and when he leaves school, his IQ is higher than children of twenty years ago, and, yet, you know, the colleges are saying, "These kids don't know how to write." Well, they're saying that, but they're not saying, "These kids don't know how to think" -- and they're not saying, "These kids don't know how to talk" -- and they don't say, "These kids don't have good vocabularies" -- and they don't say that they're not extremely good conceptually. In fact, they admit all of those things.

The puzzlement that they appear not to understand is that once a child, or learner, develops visual-languaging, and develops that first, that visual-languaging must have a chance to be organized

and developed in the mind of the child by letting him do his own things visually -- that is, create his own cartoons, do his own role-playing, act out his own scripts, create his own scripts, write his own slide stories, or his picture stories, do his own movies -- all of the kinds of ways in which we express ourselves that are so important in our society now.

WEBB: John Dibbs, Visual Learning Coordinator with Eastman-Kodak Company. For National Public Radio, this is Gary Webb in Nashville.

(Music: "Helping")

TEACHER INTERNSHIPS

DR. LELAND DEAN: We have just not done a very good job of helping the new-comer into the profession to make that transition from a student into a practitioner.

BLAIR: That's Dr. Leland Dean of the Michigan State University College of Education. Teachers go to college for four years, spend time as student-teachers, and then go out looking for a full-time job. Dean says that they should be required to go one step further -- into a formal, one-year, teacher internship program -- similar to that required in medicine. Dean talked about his ideas with Curt Gilleo of Station WKAR in East Lansing, Michigan.

DR. DEAN: Education does a very poor job of inducting new members into the profession. We graduate someone right now with a Bachelor's Degree and a Teacher's Certificate and they're employed and placed in a classroom, and we expect that beginner to perform at the same level of competence as the person next door who's been there for 20 years.

GILLEO: Who would decide at the end of the year whether the teacher is competent or not? Who would be in charge of evaluation?

DR. DEAN: The evaluation would be done by three people -- by the intern consultant (and this intern consultant is an outstanding classroom teacher selected from the public schools, who is relieved of all other responsibilities and works entirely with ten beginning teachers -- that would be the entire responsibility for that outstanding classroom teacher selected for this role). This intern consultant is able to provide help on an individual basis; going into the classrooms of these beginning teachers and working with them; helping them develop their instructional programs; helping them over the rough spots that are bound to arise during the first year.

Now, along with the intern consultant, there would be a university consultant, and the evaluation of the beginning teacher for provisional certification would be made by the intern consultant, who's a representative of the teachers, the principal of the building representing the school administration, and the university consultant representing the university. So, it would be a shared decision among those three agencies.

GILLEO: Now, let's take a hypothetical case of a teacher who is accepted into the internship program, gets through one year of the program, and at that time the administrators decide the teacher is not competent or not of the right material to be a teacher. What happens to this person after they've spent four or five years trying to be a teacher? Is it one shot? Are they disqualified forever?

DR. DEAN: Well, this would be no different from our present system. We have someone employed for the first year, and they may not be successful in their first year of teaching, and they may not be re-employed. So, this doesn't change that in any respect.

GILLEO: Your system has some very particular provisions concerning pay. Could you explain that for me?

DR. DEAN: This is no time for us to be expecting that many new dollars are going to be put into the educational system. So, this internship that I proposed is a program that will pay for itself, and it does it in this way. The intern consultant would be paid for by the beginning teacher, getting 80% of the normal salary of a beginning teacher, and the difference between the 80% that would be paid to the beginning teacher and the full amount, the full salary for this beginner, would be paid by the school district. That 20% from those ten teachers under the jurisdiction of the intern consultant would provide the money to pay the intern consultant.

Now, the university consultant would be paid for through the tuition - because the interns would be given credit for course work during the internship year. Now, you might ask: Well, is this fair to have the beginning teacher's salary reduced by 20%? But, let's look at it and see what that beginning teacher receives in lieu of the 20% reduction.

First, the beginning teacher has a reduced load - a half-day each week. The beginning teacher is released for the group activities that would accompany the internship. Secondly, the beginning teacher is receiving support services on an individual and group basis - an unprecedented amount of help, and it might even make the difference between success & failure of that beginning teacher. And, thirdly, the beginning teacher has brought to the public school, brought to them, a program that the credits for which will be applicable toward a continuing certificate - or, if they're properly admitted to a Master's Degree program somewhere, would be a third of a Master's Degree which is actually delivered to them in their school during that first year of teaching.

Right now is an appropriate time for us to raise the standards for teacher certification. We couldn't do it for the 25 years following World War II because the supply of teachers was not adequate enough to ever meet demands, so to raise the standard at that time would have been inappropriate. But for the last five years we have had more teachers available than there have been jobs, so now we've reached a stage where the timing would be appropriate for us to raise those standards.

BLAIR: Dr. Leland Dean of the Michigan State University College of Education talking with Curt Gilleo of Station WKAR, East Lansing. Dean pointed to a surplus in the teaching profession, but the job market is tight in other areas as well, and career counseling is becoming more and more critical. And when we choose a career, we really have to consider more than the market place. The Educational Testing Service of Princeton, New Jersey -- ETS, says that personal values are very important in finding the right career. And often we don't even know what our values are. The ETS people brought us the SAT's, the Law Boards, and now something new. But, relax, it's not another test. It's a method to help identify the things we value most and least in life and work. This method is called the System of Interactive Guidance Information, "SIGI," Sigee, for short. Dr. Arthur Krohle of "ETS" talks to Susan Lieberman of Station WAMU in Washington, D.C. about "SIGI."

KROHLE: Sigi is not a test, and it's one of our first opportunities to move into an area that is of particular interest to me -- and that's a way of applying technology to helping people that is not at all test based.

LIEBERMAN: And helping people is in the direction of finding job opportunities for the future and deciding careers. At what point in one's life would one be interested in Sigi?

KROHLE: Sigi is designed for students who are in or about to enter college. It's not particularly oriented toward students who are planning to enter an occupation immediately upon graduation from high school.

We had tried to develop a system that would have particular applicability at the college and university level, simply because there have been perhaps a lack of career planning services in many institutions of the United States at that level. There perhaps has been an assumption for many a year that students who were of average or above-average intelligence who had the kind of ability to go on to college could perhaps manage their career planning on their own.

But I think we've moved into an economy that's not only sufficiently complex that it requires some form of assistance, but just to learn about the array of options that are out there -- but we moved into a period of time where I think people who administer college programs these days are realizing that perhaps this important part of life can't be left to just chance, that one ought to play some perhaps facilitative role in helping people learn about the kinds of options that are available to them and to learn how to make better decisions.

LIEBERMAN: I guess we've never used technology in this. Though, we have addressed it in other ways. I'm thinking particularly about counselors who work on college campuses and also some other written tests as I remember that exist where people can identify certain career choices that they may have. How does this fit into what we already have going?

KROHLE: Well, perhaps the most important development in the last ten or twenty years on college campuses has been the growth of counselors who are available. One of the colleges that I visited in California not long ago, for instance, had a rather full counseling staff. They had 17 full time counselors on the staff, but then I asked a question as to how many students were enrolled on campus, and there happened to be 32,000 students. So, if you do a little quick arithmetic to see how far 17 counselors will go with 32,000 students, you see that the ratios are not very favorable for the provision of service.

Also, many of the tests that have been developed -- perhaps more accurately they've been called interest inventories -- were intended to try to match people with occupations for which they might be suited. I think we've moved away from that kind of philosophy in recent years to realize that instead of a procedure whereby you'll match people with occupations, we realize that people are characterized by something we might not want to call multi-potentiality. People are able to do a variety of different kinds of things and, therefore, there's in effect a menu of career opportunities open to them from which they might choose.

So there's less of a tendency now to think about looking to fit round pegs in round holes and square pegs in square holes, but to simply provide people with the kind of coping strategies, the kind of decision-making skills with which they can look at the

options that are around them and perhaps make better decisions about their lives.

LIEBERMAN: So you're really saying that if they can identify certain strengths and values that they have that there are really a number of options open, not just to be an engineer, but perhaps to be a hospital technician or some other kind of a job that fits that.

KROHLE: I think that's just the point. And one of the major emphases that I think we need to leave with most people who are moving through the educational channels these days -- and that is, that there are many opportunities that people could enter and perhaps be satisfied with.

There had been a tendency for a long time for people to consider that they had to find the perfect occupation for them to enter to make them feel satisfied. I think we're moving away from that, and in a way that I find delightful, because I found the older kind of tradition that we were looking for, of putting a person in a particular role, was one that I found particularly unsatisfying.

I guess it's a reflection of my own career background in that I've switched careers a number of times and have seen a lot of my associates do the same kind of thing.

BLAIR: Dr. Arthur Krohle of the Educational Testing Service.

> "I'm Susan Thomas, and I have my own business, which is cassette duplication, basically in audio productions generally. The name of it is Herr Audio Productions."

BLAIR: Susan Thomas, like Dr. Krohle, was a career switcher. She sought and found a profession that accommodates her own personal values. NPR Reporter Keither Talbot prepared this sound portrait.

THOMAS: Well, I was a teacher at Washington University. I taught several courses, one on the graduate level and a couple on the undergraduate level -- mostly on women's role in society in one form or another. And this was after all the unrest on college campuses, and funds were being cut off left and right in the early seventies, '70, '71, '72 -- they're still being cut.

I don't know if it's not due to the same reasons, but it became more and more difficult for Ph. D.'s. An academic position doesn't pay well enough -- I want more money than that some day. And I recognize money as power. So, one of my current goals that is appropriate, is that I want to see more jobs for women provided.

And publishing -- think about audio work, radio, records, tapes, whatever -- as another form of publishing, which it definitely is, and therefore is a means of communicating ideas.

(SOUND OF MACHINE)

This is the duplicating equipment and I just switched on the main electronics, which controls the electronics for the reel-to-reel deck and the three cassette "slaves", as they call them. The machine that you play the master on is called the master deck, and the machines that you make the duplicates on are called slaves.

Which is also interesting when you think of the concept of reproduction. And the master-and-slave terminology applied there. It tickles me. Basically what we're doing is reproducing programs.

(SOUND OF MACHINE)

Here's a tape. This music was originally produced by Olivia Records, who started out in Washington, D.C. and have since moved to the music capital, Los Angeles. But it was recorded in a studio here in Washington, and we did the cassette off the master tape.

And one of the exciting things we've been able to do that was to offer basically financing for some original productions, in the sense of saying that they don't have to put the money up-front or even pay within 30 days necessarily, if we like the production or the music. And expect that they will be able to sell it. That's one of our main priorities.

(MUSIC)

BLAIR: Susan Thomas, of Washington, D.C., talking about job satisfaction. That story is an illustration of the challenges involved in carving out a career. We've just heard Dr. Arthur Krohle describe a new approach by the Educational Testing Service called "SIGI."

He goes on now to tell Susan Leiberman that SIGI works because it asks the right questions.

KROHLE: We began work on SIGI about seven years ago. Our goal was to try to provide a service that would be of assistance to counselors and students in colleges. We do not want to create a service that's seen in any way as a replacement for what counselors can do. But to provide a way of helping students examine their values in a rather structured kind of way. And to provide access for a way of linking that kind of value exploration with an array of occupations that might satisfy those values.

We interviewed a large number of students to find out what they felt about jobs at the present time. We asked them, for instance, to think of a job that appealed to them. Then we asked them what kinds of things they liked about it, and listened carefully to the kinds of terms that they were using--what in effect differentiated a job that they like from one that they didn't like.

We asked students, for instance, to also identify what for them would be a nightmare occupation, one that would include most of the kinds of things that they just wanted to avoid, or abhorred. And we listened carefully to those kinds of things too. We also then asked students if they had an opportunity to get any kind of information that they wanted to have about an occupation, what kind of information would they seek?

And we asked these kinds of questions of large numbers of students, to see what kinds of things they were looking for. Then gradually, we developed a list of values that we thought were rather common to a large number of people.

LIEBERMAN: Can you give some examples of what you call values, as related to job opportunities?

KROHLE: Let me start off with some of the more common ones. I think these days, particularly since we've gone through perhaps a period of a down economy that we're coming out of now, the value of job security has gone up in the minds of many people. When we were in the '60's, when it was very easy to move from job to job, almost at one's pleasure, there was little concern about whether a job offered security or not.

Another commonly-held value is the value of income, and whether or not a job offers a chance to satisfy high-income needs, for

instance. Another might be a desire for variety in one's work. One of the exercises which is included within SIGI, for instance, is to take a look at ten representative values, and to place a degree of importance or a weighting on each of these. The weighting, for instance, would be from one to eight, where one would be a high degree of importance, and eight would be a low degree of importance.

We then took a look at how several thousand students responded to this particular exercise within SIGI, to see whether or not in fact students do look at values in much the same way, or whether there's a great deal of variability. We found that there is more variability than we had thought, that high income is not a universal value. It comes closer, perhaps, to being a universal value than many of the others.

But, for instance, though a commonly expressed value--at least early on in exposure to SIGI--is the value of helping others, altruism. And it's surprising that within SIGI, where we at one point force students into a compromise position, where they have to in effect choose between two conflicting values, it's been surprising to us how quickly a value that's so commonly espoused like helping others would be given up in favor of some, perhaps more basic values, like high income.

But because a lot of students want all of everything -- for instance they weigh everything high -- we have had to develop a procedure whereby we create some forced choice situations for students.

LIEBERMAN: Let's turn to the other side of that coin, and that is the job description. How are you able to describe which of these values are the most important to the job?

KROHLE: In some jobs the information that's available is relatively of high quality. The Department of Labor, here in Washington, for instance, routinely collects information on such things as average salary, beginning salary, and so on. And the salaries that might be earned by people who have reached the top ten per cent of the salary range within a field.

But data is not routinely collected, or it's difficult to collect on such values as helping others, or variety, or prestige, for instance, which is perhaps even a more complex one. In those areas we've had to resort to sociological studies of what people have placed as prestige rankings on occupations. There have been a number of studies, for instance, where hundreds of people have been asked to rank occupations from high to low on prestige.

We've had to resort to those kinds of things. Whenever we've been in doubt, our staff at ETS has gotten together, and in effect we've polled one another to rank occupations as to whether they would satisfy a particular value or not. And then we've taken those rankings and shared them with people who are actually working in occupations in the field, to ask them what they thought about the judgments we had made about their occupations, and whether our own judgments were close to being accurate.

You have identified an interesting area, though. And that's this area of job information. Because although SIGI can present information that's been compiled in a way that's more easily usable by students, it's not able to create information that doesn't already exist. And there are aspects of information in our society that are really lacking. That's for instance elements of information that relate to the style of life that a certain kind of job might afford.

BLAIR: Dr. Arthur Krohle, talking with Susan Lieberman of Station WAMU in Washington.

For those of you who still don't know what you want to be when you grow up, SIGI's available in only seven colleges and universities at present. So if you want more information, write the Educational Testing Service, Princeton, New Jersey, 08540.

(MUSIC)

Before you can worry about being a cowboy or a school teacher or a lawyer or anything else, you've got to grow up. To grow up, you need parents. In this program we've looked at a lot of occupations, and right now we're going to look at a job many of us have, but aren't trained for -- parenting.

Schools at all levels are trying to help us be better prepared as parents, and there are a host of books and organizations we can consult about general problems. But parenting is still something we take pretty much for granted. Our next story is about a couple who had to face a rare problem with their first-born.

CHILD: Hi.

WOMAN: What's your name?

CHILD: Timmy.

WOMAN: Are you hungry?

CHILD: Yes.

WOMAN: He's always hungry.

CHILD: Dun-dee.

WOMAN: Here's a pickle.

CHILD: Pit-tle.

WOMAN: Say "thank you."

CHILD: Day-doo. Day-doo. Id eat--eat.

WOMAN: Is it good?

CHILD: Yeah.

WOMAN: A total day's intake would be 119 milligrams of phenyl-aline, 9 grams of protein, and 733 calories.

BLAIR: This exact counting of calories and protein described by Janelle Reardon for her son Timmy, is essential for Timmy's normal brain development. Timmy is a PKU baby, meaning that he has a genetic disorder that happens in about one out of every 18,000 births. PKU is the inability to metabolize one of the essential amino acids -- phenyl-aline. The body needs this protein to grow, but for a PKU baby, the level must be kept to the bare minimum, so that the system gets just what it needs for development, but no more.

If this condition is not carefully controlled by diet, irreversible brain damage will result. The child must be kept on the diet for about four years. I wanted to talk with Joe and Janelle Reardon, to find out how they're learning to cope with these unusual circumstances of parenting.

JANELLE REARDON: When Timmy was still in the hospital after he was born, their hospital personnel did a PKU test, and at the time we didn't think much about it. So, when he came home from the hospital

like anyone else, and a week later, when the baby was 11 days old, we were called by the doctor. He said the PKU test was positive. And to go to Children's Hospital right away, so that they could run more tests. And he was there for a week, having more tests done, and that's when they actually determined that he is a PKU child.

JOE REARDON: The hospital took Timmy off any kind of protein source. They put him on sugar water. When Timmy was in the hospital, I spent my evenings out at the NIH Library, digging into the medical literature. Now, a lot of it was above my head; a lot of medical terminology I wasn't familiar with.

But this is essentially a biochemical disorder, and luckily I was able to understand this part. So I read everything I could find over a period of several nights, xeroxed a lot of the important articles, brought them home for Janelle to read, and strangely enough, knowing myself from my digging into the literature a lot about the disease, gave me a lot of confidence.

JANELLE: It took until the baby had been in the hospital about 5 days, before they could really explain to me what was going on and what they were doing.

BLAIR: Did you have a fear all this time that the baby might not live?

JOE REARDON: Oh no. His life wasn't endangered, and we were learning very quickly. Within a few days we basically knew what it was all about. But still, how to bring it under control is a great worry. And you don't know whether it's going to be treatable really. Some children just don't seem to respond to the strict diet very well.

JANELLE: Because if he couldn't, that was all he could eat.

JOE: There was no alternative. Luckily he did pretty well. As a baby, he would spit up a lot after drinking. We learned to live with that. And gradually, his blood level came down to normal. Then Janelle had to keep very careful watch about everything he ate.

JANELLE: I had to keep track, and I still do, every day of the total amount of phenyl-aline, the total amount of protein, and the number of calories that he took in to his diet. Which meant that any time that I fed him, I had to measure the food before I gave it to him, and if he didn't eat it all, I had to measure what was left, and total it up. And at the end of the day, it should be the amount that he needed for his present growth level.

And this changed practically every week, until he had reached a growth plateau. We're in the neurology department of Children's Hospital now--

BLAIR: And how often do you do this now?

JANELLE: Once a month now.

(SOUND OF CHILDREN IN BACKGROUND AND CONVERSATION IN DIETICIAN'S OFFICE)

DIETICIAN: Well, I definitely think that those parents need a lot of help from the dietician. I think that you can first of all give them a lot of support by reinforcing that what they are doing is right, and that I must not give up if the child doesn't want to eat what I have prepared.

BLAIR: Does it ever happen that a very young child who must have a certain substance doesn't like that, doesn't like the taste, won't touch it -- then what do you do?

DIETICIAN: Then you have to try and fix it with something else and see if that works. We try everything we can possibly think of, and, of course, very often the parents have ideas too, because they are after all taking care of the child.

BLAIR: In your experience, is it really a tough adjustment for parents to make?

DIETICIAN: From a dietary point of view, I don't think it is that difficult, because they have been used to thinking about diet from the day the child was born.

WOMAN: Are you going to have lunch soon?

CHILD: Yes.

WOMAN: What would you like for lunch. That's squash -- would you like squash for lunch?

CHILD: No.

WOMAN: No -- how about cauliflower?

CHILD: Yes.

WOMAN: Yes, cauliflower?

CHILD: Yes.

WOMAN: Okay, I'll cook it.

JANELLE: This is where the trouble starts -- waiting till it's cooked.

BLAIR: Because he's a very hungry boy, is that right?

JANELLE: Yes, this is the word. Eat, eat, constantly.

TIMMY: Uh hum -- eat -- eat -- eat. (LAUGHTER)

BLAIR: Pretty soon you'll do your own cooking, won't you?

TIMMY: No. (LAUGHTER)

JOE: Yeah, you've got peaches and pickles, don't you Timmy? Now, did you roll up your sleeve. And you didn't get your bib. Let me get the bib.

When Timmy was first starting to eat solid foods, I guess at about six weeks old, and for a long time after that, he was a voracious eater. I guess he was always hungry in a sense, because he got so little protein. But it was really a pleasure to watch the child eat.

So, in a sense, preparing a very strict diet and keeping tabs on it became second nature, and then we were compensated because he was such a good eater, and obviously enjoyed it. And that's pretty much continued up to this point where he's almost three years old.

JANELLE: But now he asks for things.

BLAIR: Like what?

JANELLE: Corn, green beans, yellow beans.

JOE: Bananas, he loves.

JANELLE: Bananas, he loves. And we have to ration the bananas.

BLAIR: Why?

JANELLE: Bananas are very high in phenyl-aline, where apples, for instance, have almost none.

BLAIR: What would happen if Timmy broke his diet, if he had much too much or much too little vital protein?

JANELLE: It would take several days or several weeks to do any damage, but if a child were not on this diet for as much as a month, he could lose five IQ points for each month he's not on the diet. So you can see that one month being off the diet could make a great deal of difference -- between a hundred and a 95 IQ.

BLAIR: What's that?

TIMMY: Timmy. One - two - three - four - five.

BLAIR: Very good. How old are you, Timmy?

TIMMY: Three.

JANELLE: I've been very positive about it since we've seen Timmy develop as a normal child. I feel that he has above-normal intelligence considering what he's learned to do. He can count to thirty. He knows his alphabet. And he isn't quite three years old. I'm very proud of him, and so all my feelings since the first few months have been very positive.

JOE: For us right now, Timmy as three years old seems perfectly normal, healthy, and happy. We feel very good about this, but there's still the lurking uncertainty that the diet might be only partially effective. He might still be somewhat below normal in intelligence when he grows up. That we won't know until he's perhaps ten, eleven, or twelve years old. And it's something that we'll have to accept if it ever turns out.

JANELLE: I think that parents who have a problem like this, or any medical problem, should get as much information as they can. If they have questions, they should talk to their doctors, talk to hospital staffs, talk to dieticians, anyone they need to talk to -- get as much literature as possible so that they can understand it. Then you know how to treat it exactly and why.

He's always accepted practically everything I've given him to eat. The only thing he's rejected has been spinach and beets.

BLAIR: He's normal.

JANELLE: Yes, very normal. Have you finished your lunch now?

TIMMY: No.

BLAIR: Joe and Janelle Reardon with their son Timmy. Most, but not all, hospitals screen newborns for PKU, so expectant mothers should ask their doctors.

(MUSIC AND SOUND OF CHILD WITH PARENTS IN BACKGROUND)

BLAIR: By the way, OPTIONS IN EDUCATION got some good news this week. We won an award from the Education Writers Association. So, we wanted to thank you for writing to us with your opinions and suggestions -- they helped us get better.

(MUSIC -- It's Getting Better All the Time -- Beatles)

BLAIR: If you'd like a transcript of this program, send 25 cents to "National Public Radio -- Education," Washington, D.C. 20036. Please indicate that you want program number 24. That address again for transcript number 24 is National Public Radio -- Education, Washington, D.C. 20036. A cassette costs $4.00 and a transcript costs 25 cents.

(MUSIC)

BLAIR: This program is produced by Midge Hart. The Executive Producer of OPTIONS IN EDUCATION is John Merrow. I'm Wendy Blair.

CHILD: OPTIONS IN EDUCATION is a co-production of the Institute for Educational Leadership at the George Washington University and National Public Radio.

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CHILD: This is NPR -- National Public Radio.

RESOURCE LIST

1. American Academy of Judicial Education
   1426 H Street, Northwest
   Washington, D. C. 2000

2. Dr. Leland Dean
   517 Erickson Hall
   College of Education
   Michigan State University
   East Lansing, Michigan 48824

3. International Visual Literacy Association
   Center for Visual Literacy
   Gallaudet College
   Seventh & Florida Avenues, Northwest
   Washington, D. C.

4. Kluger, Richard, Simple Justice, New York, Alfred A. Knopf, 1976.

5. For information about PKU write:

   U.S. Department of Health, Education & Welfare
   Public Health Service
   Health Services Administration
   Rockville, Maryland 20852

6. System of Interactive Guidance Information (SIGI)
   Educational Testing Service
   Princeton, New Jersey 08540